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February 15, 2002

Ms. Lauren V. Fondahl
Biosolids Coordinator
Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

**Re: Submittal of Sludge Use and Disposal Information for Calendar
Year 2001**

Dear Ms. Fondahl:

This letter and supplemental documents serves to comply with 40 CFR Part 503.18 reporting requirements.

Eastern Municipal Water District (EMWD) provides water and sewer service to a population of nearly 480,000 people. EMWD owns and operates five regional water reclamation facilities (RWRFs) within its 550 square mile area. The Sun City RWRF was off-line and influent flows have been diverted to the Perris Valley RWRF.

The following information is provided according to Part 503 regulations:

1. The five RWRFs treating domestic sewage, their design capacity, and corresponding state-issued Wastewater Discharge Permit numbers are:

<u>Name of Facility</u>	<u>Design Capacity</u>	<u>Permit No.</u>
Hemet/San Jacinto RWRF	11.0 MGD	Order No. 88-94
Moreno Valley RWRF	16.0 MGD	Order No. 90-151
Perris Valley RWRF	11.0 MGD	Order No. 90-135
Sun City RWRF	3.0 MGD	Order No. 90-140
Temecula Valley RWRF	8.0 MGD	Order No. 2000-165

2. EMWD is the owner and operator of the five RWRFs. We are a "Special District" according to the California Code of Regulations.
3. A total of 48,777 wet tons of biosolids were generated by the four RWRFs during calendar year 2001. Approximately 77.27 percent of the biosolids generated were handled by a private contractor (37,692 wet tons) and were either composted to Class A, Exceptional Quality standards (19,147 wet tons) or land applied at Class A or B standards (18,544 wet tons). The name, address, and phone number of the contractor is:

Synagro Technologies, Inc.
P.O. Box 7027
Corona, CA 91718-7027
Phone Number: (909) 277-2662

The remaining 23.73 percent of the biosolids generated by the District (11,085 wet tons) were either pasteurized or solar-dried by the District at the Perris Valley RWRF. The biosolids generated from December, 2000 through March, 2001 (2,498 wet tons), were pasteurized and land applied as Class A quality in December, 2001 on 74.5 acres of District-owned land located at the west end of the Perris Valley RWRF. The remaining biosolids generated from March, 2001 through December, 2001 at the Perris Valley RWRF were solar-dried and will be land applied as Class B quality in Needles, California by Synagro Technologies, Inc. in calendar year 2002.


4. The District is certifying that the biosolids that were land applied by Synagro Technologies in Riverside, San Diego, and Needles met Class B, Table 3 metals and vector attraction reduction requirements according to the Part 503 regulations (refer to the tabular sections of Appendix B). Synagro Technologies, through USA Transport, certified that the biosolids applied in Kern County met Class A standards. Enclosed with this report are copies of the certification statements for the Temecula Valley, Hemet/San Jacinto, and Moreno Valley RWRFs, and the appropriate supporting data. The Perris Valley RWRF biosolids met Class A standards when the District applied to land near the Perris Valley RWRF, and a copy of the certification is enclosed. The certification statement contains a minimum of 73 percent solids in the Class A biosolids, but the actual percent solids was at least 91.9 when land applied, therefore meeting the minimum requirement of 75 percent. The remainder of the Perris Valley RWRF biosolids have been certified as Class B (also enclosed), and will be land applied in Needles in calendar

Ms. Lauren V. Fondahl
February 15, 2002
Page 3

year 2002.

If you need any other information, please contact Michael A. Luker, Assistant General Manager, Operations and Maintenance , at (909) 928-3777, ext. 6255, or Jayne Joy, P.E., Director of Environmental and Regulatory Compliance, ext. 6241.

Sincerely,


Anthony J. Pack
General Manager

cc: Michael A. Luker, Assistant General Manager, Operations and Maintenance
David Morycz, Manager, Environmental Services
Anne Briggs, Senior Environmental Compliance Analyst

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APPENDIX A
BIOSOLIDS PRODUCTION
FOR
CALENDAR YEAR
2001

EMV Biosolids Reuse Report for 2001

		Hemet-San Jacinto	Moreno Valley	Perris Valley	Temecula Valley	Total
		Product Amount	Product Amount	Product Amount	Product Amount	Product Amount
Composted	Jan	133.98	499.58	319.61	340.35	1,293.52
	Feb	162.02	381.28	331.48	328.21	1,202.99
	Mar	120.78	421.35	817.39	313.64	1,673.16
	Apr	53.49	136.77	806.55	95.56	1,092.37
	May	22.24	540.39	644.36	126.03	1,333.02
	Jun		690.63	692.52	77.54	1,460.69
	Jul		752.33	842.08	54.82	1,649.23
	Aug		733.12	714.11	157.59	1,604.82
	Sep		630.68	1,238.02	245.13	2,113.83
	Oct	18.82	617.82	944.34	74.1	1,655.08
	Nov	26.24	859.82	992.91	89.96	1,968.93
	Dec		760.61	1,209.57	130.06	2,100.24
	Total	537.57	7,024.38	9,552.94	2,032.99	19,147.88
Land Application of Class B in Kern County	Jun	128.95			297	425.95
	Jul				764.27	764.27
	Aug				654.33	654.33
	Sep				98.12	98.12
	Total	128.95			1,813.72	1,942.67
Land Application of Class B in Needles CA	Nov	390.49			445.98	836.47
	Dec	967.92			906.51	1,874.43
	Total	1,358.41			1,352.49	2,710.9
Land Application of Class B in Riverside County	Jan	854.15	800.51		526	2,180.66
	Feb	686.25	791.68		435.79	1,913.72
	Mar	970.48	958.37		419.52	2,348.37
	Apr	766.13	1,176.43		731.8	2,674.36
	May	157.34	795.61		711.62	1,664.57
	Jun	179.93			240.41	420.34
	Jul	151.25				151.25
	Aug				15.68	15.68
	Total	3,765.53	4,522.6		3,080.82	11,368.95
Land Application of Class B in San Diego County	Sep	240.91			465.4	706.31
	Oct	467.92			868.61	1,336.53
	Nov	202.16			276.73	478.89
	Total	910.99			1,610.74	2,521.73
Total		6,701.45	11,546.98	9,552.94	9,890.76	37,692.13

SLUDGE PRODUCTION RECORDS FOR 2001

MONTH		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Total Pounds	Pasteurized	259,709	164,564	80,256	0	0	0	0	0	0	0	0	0	
Total Tons		129.9	82.3	40.1	0	0	0	0	0	0	0	0	0	
Percent Solids		15.1	15.6	16	0	0	0	0	0	0	0	0	0	
Wet Tons	Unpasteurized dirt drying beds	860	528	251	0	0	0	0	0	0	0	0	0	1,639
Total Pounds		73,690	105,432	44,394	0	0	0	0	0	0	0	0	0	
Total Tons		36.8	52.7	22.2	0	0	0	0	0	0	0	0	0	
Percent Solids		13.8	13.8	14.7	0	0	0	0	0	0	0	0	0	
Wet Tons	Unpasteurized to Synagro	267*	382*	151*	0	0	0	0	0	0	0	0	0	800
Total Pounds		61,374	93,564	248,000	215,600	204,400	181,256	212,600	198,000	268,800	233,200	266,208	305,900	
Total Tons		30.7	46.8	124	107.8	102.2	90.6	106.3	99	134.4	116.6	133.1	153	
Percent Solids		13.5	13.8	14.7	14	14.2	13.9	13.2	13.9	14	13.1	14.1	13.3	
Wet Tons	Unpasteurized to Asphalt	227	339	843	770	720	652	805	712	960	897	944	1150	9,019
Total Pounds		0	0	163,170	209,158	62,400	270,216	303,000	362,600	265,739	270,800	250,698	222,077	
Total Tons		0	0	81.6	104.6	31.2	135.1	151.5	181.3	132.9	135.4	125.3	111	
Percent Solids		0	0	14.7	14	14.2	13.9	13.2	13.9	14	13.1	14.1	13.3	
Wet Tons		0	0	555	747	219	972	1148	1305	949	1027	889	835	8,646
*Dirt drying Distribution	Bed #1	Bed #2	Bed #3	Bed #4	Bed #5	Bed #6	Bed #7	Bed #8	Bed #9	Bed #10	Bed #11	Bed #12	Total wet tons all categories for 2001	20,104
January	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
February	0	0	101 wet tons	0	0	281 wet tons	0	0	0	0	0	0		
March	0	23 wet tons	70 wet tons	58 wet tons	0	0	0	0	0	0	0	0		
April	0	0	0	0	0	0	0	0	0	0	0	0		
May	0	0	0	0	0	0	0	0	0	0	0	0		
June	0	0	0	0	0	0	0	0	0	0	0	0		
July	0	0	0	0	0	0	0	0	0	0	0	0		
August	0	0	0	0	0	0	0	0	0	0	0	0		
September	0	0	0	0	0	0	0	0	0	0	0	0		
October	0	0	0	0	0	0	0	0	0	0	0	0		
November	0	0	0	0	0	0	0	0	0	0	0	0		
December	0	0	0	0	0	0	0	0	0	0	0	0		

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11,085 wet tons pasteurized or solar dried sludge derived from 20,104 (total) - 9,019 unpasteurized to Synagro

ANNUAL CERTIFICATION STATEMENTS

PERRIS VALLEY REGIONAL WATER
RECLAMATION FACILITY

Notice and Necessary Information

To be Completed by Preparers of Class A Biosolids

Facility Name: PERRIS VALLEY #2 BARDENPHO RWRP Monitoring Period 1/1/01 to 12/31/01

1. Pollutant and Nitrogen concentrations (report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N
Avg	5.05	1.45	362.5	12.98	2.9	8.083	40.75	9.75	470	45700	14190
Max	6.2	1.8	410	18	4	12	62	15	510	49400	23000
Table 3	41	39	1500	300	17	na	420	100	2800	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na

2. Class A Pathogen Reduction

- i) ☒ fecal coliform = _____ mpn/gram salmonella = 1 (maximum) mpn/4 grams
Class A: fecal coliform < 1000 mpn/gram OR salmonella < 3 mpn/4 grams
- ii) _____ testing: enteric virus = _____ pfu/4 grams, viable helminth ova = _____/4 grams
Class A: enteric virus < 1 pfu/r grams, viable helminth ova < 1/4 grams
- _____ composting: windrow: _____ days at _____ to _____ degrees F/C; _____ turns (attach logs of temps, turns)
SAP; in vessel: _____ days at _____ to _____ degrees F/C (attach logs of temps)
Class A: windrow: > 15 days; > 55 degrees C, 5 turns. SAP, in vessel: > 3 days; > 55 degrees C
- ☒ heat treatment: 30 (min) minutes/hours/days; 158 (min) degrees F; 15 (min) % solids, heating method: _____
Class A: (use appropriate equation and minimum time in 503.32(a) Alternative 1, A - D)
- _____ heat drying: temp: _____ degrees F/C; % solids = _____
Class A: temp > 80 degrees C, % solids > 90 %
- _____ pasteurization: temp = _____ degrees C/F, time = _____
Class A: temp > 70 degrees C, time > 30 min
- _____ alkali treatment: time pH above 12 = _____ (attach times measured); time temp > 52 degrees C = _____
(attach times temp measured) ; % solids = _____
Class A: pH > 12 for > 72 hours, temp > 52 degrees C for 12 hours (while pH > 12); air dried until solids > 50%
- _____ other: (describe parameters)

3. Vector Attraction Reduction:

- _____ Option 1: % VS_{in} = _____ % VS_{out} = _____ % VSR = _____
VAR: VSR > 38%
- _____ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- _____ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- _____ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- _____ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH 12 for 2 hours after alkali addition, 11.5 for additional 22 hrs
- ☒ Option 7: % solids = 73 (min) Stabilization method: _____ Option 8: % solids = _____
VAR: stabilized solids > 75% VAR: unstabilized solids > 90%
- _____ Option 9/10: Applier will incorporate in _____ hours
VAR: inject in 1 hr, incorporate in 6 hrs, < 8 hours after treatment process

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Mike Luker, Assistant General Manager of Operations & Maintenance Phone: (909) 928-3777
ext. 4235

E-mail: lukerm@emwd.org Signature: Mike Luker Date: 2/15/02

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/01 to 12/31/01
 PERRIS VALLEY #2 BARDENPHO RWRF

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
3/8/01	5.8	0.87	5.8	4.17
6/7/01	5			
9/11/01	<5			
12/3/01	0.87			

Arsenic (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	2.4	2.4	6.2	4.3
7/13/01	6.2			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
3/8/01	1.1	0.97	1.8	1.22
6/7/01	1.8			
9/11/01	1			
12/3/01	0.97			

Cadmium (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	1	1	1.2	1.1
7/13/01	1.2			

COPPER

Date:	Results:	Minimum	Maximum	Average
3/8/01	350	220	350	272.5
6/7/01	240			
9/11/01	280			
12/3/01	220			

Copper (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	340	340	410	375
7/13/01	410			

LEAD

Date:	Results:	Minimum	Maximum	Average
3/8/01	9.1	5.8	18	10.73
6/7/01	18			
9/11/01	10			
12/3/01	5.8			

Lead (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	7.5	7.5	8.4	7.95
7/13/01	8.4			

MERCURY

Date:	Results:	Minimum	Maximum	Average
3/8/01	<4	<4	4	4
6/7/01	<4			
9/11/01	<4			
12/3/01	<4			

Mercury (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	1.8	1.8	1.8	1.8

METALS

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
3/8/01	4.4	4.4	7	5.73
6/7/01	5.4			
9/11/01	7			
12/3/01	6.1			

Molybdenum (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	6.8	6.8	12	8.62
6/26/01	7			
7/13/01	8.7			
7/13/01	12			

NICKEL

Date:	Results:	Minimum	Maximum	Average
3/8/01	62	15	62	31
6/7/01	28			
9/11/01	15			
12/3/01	19			

Nickel (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	23	16	23	19.5
7/13/01	16			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
3/8/01	<7.4	6	15	8.98
6/7/01	<15			
9/11/01	6			
12/3/01	7.5			

Selenium (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	6.3	2.7	6.3	4.5
7/13/01	2.7			

ZINC

Date:	Results:	Minimum	Maximum	Average
3/8/01	360	320	490	382.5
6/7/01	490			
9/11/01	360			
12/3/01	320			

Zinc (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	390	390	510	450
7/13/01	510			

NON-METALS

Past. Sludge Detention time

Date:	Results:	Minimum	Maximum	Average
1/5/01	30	30	35	31.57
1/6/01	30			
1/7/01	30			
1/8/01	35			

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/01 to 12/31/01
 PERRIS VALLEY #2 BARDENPHO RWRP

NON-METALS

Past. Sludge Detention time

Date:	Results:	Minimum	Maximum	Average
1/9/01	35	30	35	31.57
1/10/01	30			
1/17/01	30			
1/18/01	30			
1/19/01	30			
1/20/01	30			
1/21/01	35			
1/22/01	30			
1/23/01	30			
1/24/01	30			
1/25/01	30			
1/26/01	30			
1/27/01	30			
1/28/01	30			
2/15/01	30			
2/16/01	30			
2/17/01	33			
2/18/01	33			
2/20/01	30			
2/21/01	30			
2/22/01	30			
2/23/01	30			
2/24/01	35			
2/25/01	30			
2/26/01	35			
2/27/01	35			
2/28/01	30			
3/1/01	35			
3/2/01	34			
3/3/01	35			
3/4/01	35			

Past. Sludge Temp

Date:	Results:	Minimum	Maximum	Average
1/5/01	158	158	166	158.63
1/6/01	158			
1/7/01	158			
1/8/01	158			
1/9/01	158			
1/10/01	158			
1/17/01	158			
1/18/01	158			
1/19/01	158			
1/20/01	158			
1/21/01	158			
1/22/01	158			
1/23/01	158			
1/24/01	158			
1/25/01	166			
1/26/01	166			
1/27/01	158			

NON-METALS

Past. Sludge Temp

Date:	Results:	Minimum	Maximum	Average
1/28/01	158			
2/15/01	160			
2/16/01	160			
2/17/01	158			
2/18/01	158			
2/20/01	158			
2/21/01	158			
2/22/01	158			
2/23/01	158			
2/24/01	158			
2/25/01	158			
2/26/01	158			
2/27/01	158			
2/28/01	160			
3/1/01	158			
3/2/01	158			
3/3/01	158			
3/4/01	158			

Salmonella (P) Bed 9

Date:	Results:	Minimum	Maximum	Average
8/10/01	<0.8	<0.8	0.9	0.83
8/10/01	<0.8			
8/10/01	<0.9			

Salmonella (P) Bed SE

Date:	Results:	Minimum	Maximum	Average
7/13/01	<1	<1	1	1
7/13/01	<1			
7/13/01	<1			

Total Solids (NP) Mix

Date:	Results:	Minimum	Maximum	Average
6/26/01	79	79	94.7	86.85
7/13/01	94.7			

Total Solids (P) Mix

Date:	Results:	Minimum	Maximum	Average
6/26/01	73	73	91.9	82.45
7/13/01	91.9			

Total Solids BP-Cake

Date:	Results:	Minimum	Maximum	Average
3/8/01	13	13	16.6	14.59
6/7/01	14			
6/19/01	15			
6/19/01	15			
6/19/01	14			
6/19/01	14			
7/13/01	16.6			
7/13/01	15.1			
7/13/01	14.9			
7/13/01	15.2			

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/01 to 12/31/01
 PERRIS VALLEY #2 BARDENPHO RWRP

NON-METALS

Total Solids BP-Cake

Date:	Results:	Minimum	Maximum	Average
7/26/01	15	13	16.6	14.59
7/26/01	14.4			
7/26/01	15.2			
7/26/01	15.2			
9/11/01	14.1			
9/19/01	15			
9/19/01	14			
12/3/01	13			

NUTRIENTS

AMMONIA AS N (P)

Date:	Results:	Minimum	Maximum	Average
6/26/01	23000	12000	23000	17500
7/13/01	12000			

NH-4 As N (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	12700	9050	12700	10875
7/13/01	9050			

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
6/26/01	49400	42000	49400	45700
7/13/01	42000			

TKN (P)

Date:	Results:	Minimum	Maximum	Average
6/26/01	72400	54000	72400	63200
7/13/01	54000			



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October 31, 2001

Mr. Brent McManigal
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. McManigal:

Attached please find the certification statement for the Perris Valley RWRF for solar-dried biosolids stored since March of 2001.

If you have any questions regarding these reports, please contact Jayne Joy at ext. 6241.

Sincerely,

Mike Luker
*Assistant General Manager,
Administration and Maintenance*

cc: David Morycz, Manager of Regulatory Services
Anne Briggs, Senior Environmental Compliance Analyst

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Notice and Necessary Information
To be Completed by Preparers of Class A Biosolids

Facility Name: PERRIS VALLEY #2 BARDENPHO RWRP Monitoring Period 1/1/01 to 9/30/01

1. Pollutant and Nitrogen concentrations (report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N
Avg	<u>4.317</u>	<u>1.25</u>	<u>349.2</u>	<u>10.31</u>	<u>2.517</u>	<u>8.623</u>	<u>20.58</u>	<u>6.767</u>	<u>453.3</u>	<u>45700</u>	<u>14190</u>
Max	<u>6.2</u>	<u>1.8</u>	<u>450</u>	<u>18</u>	<u>4</u>	<u>12</u>	<u>28</u>	<u>15</u>	<u>520</u>	<u>49400</u>	<u>23000</u>
Table 3	<u>41</u>	<u>39</u>	<u>1500</u>	<u>300</u>	<u>17</u>	<u>na</u>	<u>420</u>	<u>100</u>	<u>2800</u>	<u>na</u>	<u>na</u>
Table 1	<u>75</u>	<u>85</u>	<u>4300</u>	<u>840</u>	<u>57</u>	<u>75</u>	<u>420</u>	<u>100</u>	<u>7500</u>	<u>na</u>	<u>na</u>

2. Class A Pathogen Reduction

- i) ☒ fecal coliform = 5,739 mpn/gram salmonella = (maximum) mpn/4 grams
Class A: fecal coliform < 1000 mpn/gram OR salmonella < 3 mpn/4 grams
- ii) ☐ testing: enteric virus = _____ pfu/4 grams, viable helminth ova = _____/4 grams
Class A: enteric virus < 1 pfu/r grams, viable helminth ova < 1/4 grams
- ☐ composting: windrow: _____ days at _____ to _____ degrees F/C; _____ turns (attach logs of temps, turns)
SAP; in vessel: _____ days at _____ to _____ degrees F/C (attach logs of temps)
Class A: windrow: > 15 days; > 55 degrees C, 5 turns. SAP, in vessel: > 3 days; > 55 degrees C
- ☐ heat treatment: 30 (min) minutes/hours/days; _____ (min) degrees F; _____ (min) % solids, heating method: _____
Class A: (use appropriate equation and minimum time in 503.32(a) Alternative 1, A - D)
- ☐ heat drying: temp: _____ degrees F/C; % solids = _____
Class A: temp > 80 degrees C, % solids > 90 %
- ☐ pasteurization: temp = _____ degrees C/F, time = _____
Class A: temp > 70 degrees C, time > 30 min
- ☐ alkali treatment: time pH above 12 = _____ (attach times measured); time temp > 52 degrees C = _____
(attach times temp measured) ; % solids = _____
Class A: pH > 12 for > 72 hours, temp > 52 degrees C for 12 hours (while pH > 12); air dried until solids > 50%
- ☒ other: (describe parameters) air drying - greater than 90 days and greater than 0°C

3. Vector Attraction Reduction:

- ☐ Option 1: % VS_{in} = _____ % VS_{out} = _____ % VSR = _____
VAR: VSR > 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH 12 for 2 hours after alkali addition, 11.5 for additional 22 hrs
- ☒ Option 7: % solids = 93 (min) Stabilization method: _____ Option 8: % solids = _____
VAR: stabilized solids > 75% VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will incorporate in _____ hours
VAR: inject in 1 hr, incorporate in 6 hrs, < 8 hours after treatment process

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235

E-mail: packa@emwd.org

Signature: Mike Luker

Date: 10/31/01

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

LIMS NUMBER	FECAL COLIFORM MPN/100g	TOTAL SOLIDS	FECAL RESULT MPN/g TS (Fecal Result divided by Total Solids)	Log of previous column
E01102311-01	500,000	91.49	5,465	3.74
E01102311-02	1,100,000	91.14	12,069	4.08
E01102311-03	220,000	92.94	2,367	3.37
E01102311-04	1,300,000	90.91	14,300	4.16
E01102311-05	116,000	91.74	1,264	3.10
E01102311-06	40,000	93.25	429	2.63
E01102311-07	300,000	90.95	3,299	3.52
			Arithmetic Avg of Logs	3.51
	GEOMETRIC MEAN		(Anti-log of Arith. Avg.)	3,270 = 3.3E+03

APPROVED

OCT 26 2001

AMY MORA

PVUPSW503-2
OCTOBER 2001

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

LIMS NUMBER	FECAL COLIFORM MPN/100g	TOTAL SOLIDS	FECAL RESULT MPN/g TS (Fecal Result divided by Total Solids)	Log of previous column
E01102311-08	8,000,000	89.70	89,186	4.95
E01102311-09	8,000,000	92.57	86,421	4.94
E01102311-10	130,000	92.85	1,400	3.15
E01102311-11	8,000,000	91.75	87,193	4.94
E01102311-12	1,100,000	92.22	11,928	4.08
E01102311-13	5,000,000	92.41	54,107	4.73
E01102311-14	3,600,000	92.12	39,079	4.59
			Arithmetic Avg of Logs	4.48
	GEOMETRIC MEAN		(Anti-log of Arith. Avg.)	30,352 = 3.0E+04

PVUPNW503
OCTOBER 2001

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

GEOMETRIC MEAN
Fecal Coliform/g Total Solids

LIMS NUMBER	FECAL COLIFORM MPN/100g	TOTAL SOLIDS	FECAL RESULT MPN/g TS (Fecal Result divided by Total Solids)	Log of previous column
E01102311-15	30,000,000	88.87	337,572	5.53
E01102311-16	8,000,000	88.67	90,222	4.96
E01102311-17	13,000,000	89.10	145,903	5.16
E01102311-18	800,000	90.11	8,878	3.95
E01102311-19	700,000	89.81	7,794	3.89
E01102311-20	11,000,000	90.22	121,924	5.09
E01102311-21	2,200,000	83.10	26,474	4.42
			Arithmetic Avg of Logs	4.71
	GEOMETRIC MEAN		(Anti-log of Arith. Avg.)	51,739 = 5.2E+04

PVUPMW503
OCTOBER 2001

QUARTERLY CERTIFICATION STATEMENTS
(January – March, 2001)

HEMET/SAN JACINTO, MORENO VALLEY AND
TEMECULA VALLEY REGIONAL WATER
RECLAMATION FACILITIES



Board of Directors

President

Rodger D. Siems

Vice President

Richard R. Hall

Marion V. Ashley

Randy A. Record

David J. Slawson

Board Secretary

Mary C. White

General Manager

John B. Brudin

Director of the

Metropolitan Water

District of So. Calif.

Marion V. Ashley

Treasurer

Joseph J. Kuebler, CPA

Legal Counsel

Redwine and Sherrill

April 24, 2001

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Grey:

Attached please find the certification statements for the first quarter (January through March, 2001) for Hemet/San Jacinto, Temecula Valley, and Moreno Valley RWRFs. As per our attached e-mail to Jeff King of your company on January 13, 2001, the Moreno Valley RWRf failed to meet the proper volatile solids reduction for this time period. It is our understanding that regulatory compliance was met by field incorporation within 6 hours.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or Jayne Joy at ext. 6241.

Sincerely,

Anthony J. Pack
Deputy General Manager,
Administration and Operations

cc: Mike Luker, Director of Water Reclamation
David Morycz, Manager of Regulatory Services
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WPI\ENVIRON\BRIGGS\CERTCOVE.SLD

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: MORENO VALLEY RWRP Monitoring Period 1/1/01 to 3/31/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	11.5	< 0.92	280	10	< 3	4.84	45.5	< 6.5	290	6.06%	0.64%	15.87
Max	21	< 0.94	320	10	< 3	6	49	< 6.6	310	6.06%	0.64%	17
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 1/1/01 to 3/31/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 3$ (temp, degrees C) for times between 15 and 60 days
☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 4$ (temp, degrees C) for times between 40 and 60 days
☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C
☒ fecal coliform: geometric mean of seven samples = 210,000 (maximum)
Class B: geometric mean of seven samples is $< 2,000,000$ mpn
☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

3. Vector Attraction Reduction:

☒ Option 1: VSR = 31.27 (average) 16.38 (minimum)
VAR: VSR 38%
☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR $< 17\%$ after 40 days (anaerobic), $< 15\%$ after 30 days (aerobic)
☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hours
☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids $> 75\%$
☐ Option 8: % solids = _____
VAR: unstabilized solids $> 90\%$
☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 4/27/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/2001 to 3/31/2001
 MORENO VALLEY RWRP

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
1/10/2001	21	2	21	11.5
3/9/2001	2			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
1/10/2001	<0.91	<0.91	0.94	0.93
3/9/2001	<0.94			

COPPER

Date:	Results:	Minimum	Maximum	Average
1/10/2001	320	240	320	280
3/9/2001	240			

LEAD

Date:	Results:	Minimum	Maximum	Average
1/10/2001	10	10	10	10
3/9/2001	10			

MERCURY

Date:	Results:	Minimum	Maximum	Average
1/10/2001	<3	<3	3	3
3/9/2001	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
1/10/2001	3.7	3.7	6	4.85
3/9/2001	6			

NICKEL

Date:	Results:	Minimum	Maximum	Average
1/10/2001	42	42	49	45.5
3/9/2001	49			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
1/10/2001	<6.4	<6.4	6.6	6.5
3/9/2001	<6.6			

ZINC

Date:	Results:	Minimum	Maximum	Average
1/10/2001	310	270	310	290
3/9/2001	270			

NON-METALS

% Vol Reduce

Date:	Results:	Minimum	Maximum	Average
1/4/2001	33.8	16.38	41.68320762	27.31
1/8/2001	23.61			
1/11/2001	31.87			

NON-METALS

% Vol Reduce

Date:	Results:	Minimum	Maximum	Average
1/15/2001	28			
1/18/2001	27.77			
1/22/2001	24.84			
1/25/2001	29.11			
1/29/2001	26.79			
2/1/2001	27.77			
2/5/2001	22.39			
2/15/2001	24.21			
2/26/2001	19.6			
3/1/2001	16.38			
3/5/2001	35.79			
3/8/2001	19.25			
3/12/2001	19.68			
3/19/2001	41.68			
3/22/2001	39.22			

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
1/10/2001	6400	6400	6400	6400

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
1/10/2001	17	15	17	15.88
1/11/2001	17			
1/12/2001	15			
1/15/2001	16			
1/16/2001	15			
1/17/2001	15			
1/18/2001	16			
3/9/2001	16			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
1/18/2001	210000	210000	210000	210000

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
1/10/2001	60600	60600	60600	60600

TKN

Date:	Results:	Minimum	Maximum	Average
1/10/2001	67000	67000	67000	67000

Briggs, Anne

From: Meacham, Robert
Sent: Wednesday, January 17, 2001 1:24 PM
To: Luker, Mike
Cc: Ingersol, Steve; Wippler, Mark; Briggs, Anne
Subject: FW: VOL SOLIDS REDUCTION

-----Original Message-----

From: King, Jeffrey [mailto:JKing@SYNAGRO.com]
Sent: Tuesday, January 16, 2001 10:53 PM
To: 'Meacham, Robert'
Subject: RE: VOL SOLIDS REDUCTION

Robert, to follow up on this.

By not meeting the Class B requirement of 38% Volitol Solids Reduction, it requires me to have this material spread and incorporated within a 6 hour time period for a land application site. It does not eliminate the use of it in the field, it only restricts the way we handle it. The concern here is to minimize vector attraction since the material is not fully stabilized.

If the pathogen levels were to increase beyond EPA 503 standards then we would have to eliminate the use of it in the fields.

Please keep me posted.

If you would need to ask questions or need more information please feel free to contact our Technical Services Director, Mark Grey: mgrey@synagro.com

Thanks, Jeff King

-----Original Message-----

From: Meacham, Robert
To: 'jking@synagro.com'
Cc: Meacham, Robert
Sent: 1/13/01 1:10 PM
Subject: VOL SOLIDS REDUCTION

Jeff, I wanted to let you know that the sludge currently being hauled out

of the Moreno Valley Regional Water Reclamation Facility (EMWD) does not meet the Class B requirement of 38% Vol. Solids Reduction requirement.

The

tests we ran on 1/11/01 failed. We retested on 1/12/01 and it failed again.

With the recent rainfall we received in our area I doubt that any sludge has

been land applied anyway. We will keep you posted on this matter and let you

know when we are meeting the requirements.

Thanks,

Robert Meacham

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: TEMECULA VALLEY RWRP Monitoring Period 1/1/01 to 3/31/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	11	1.04	485	7.45	<3	9.8	43.5	9.55	425	4.5%	2.1%	16.25
Max	17	1.2	630	8.3	<3	9.8	46	12	540	4.5%	2.1%	21
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 1/1/01 to 3/31/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 3 (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 4 (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C
- ☒ fecal coliform: geometric mean of seven samples = 48,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is \geq 12

3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 54.35 (average) 44.15 (Minimum)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH \geq 12 for 2 hours after alkali addition, \geq 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 4/24/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/01 to 3/31/01
 TEMECULA VALLEY RWRP

METALS				
ARSENIC				
Date:	Results:	Minimum	Maximum	Average
1/10/01	17	5	17	11
2/8/01	5			
CADMIUM				
Date:	Results:	Minimum	Maximum	Average
1/10/01	<0.88	0.88	1.2	1.04
2/8/01	1.2			
COPPER				
Date:	Results:	Minimum	Maximum	Average
1/10/01	340	340	630	485
2/8/01	630			
LEAD				
Date:	Results:	Minimum	Maximum	Average
1/10/01	8.3	6.6	8.3	7.45
2/8/01	6.6			
MERCURY				
Date:	Results:	Minimum	Maximum	Average
1/10/01	<3	<3	<3	3
2/8/01	<3			
MOLYBDENUM				
Date:	Results:	Minimum	Maximum	Average
1/10/01	9.8	9.8	9.8	9.8
NICKEL				
Date:	Results:	Minimum	Maximum	Average
1/10/01	46	41	46	43.5
2/8/01	41			
SELENIUM				
Date:	Results:	Minimum	Maximum	Average
1/10/01	7.1	7.1	12	9.55
2/8/01	12			
ZINC				
Date:	Results:	Minimum	Maximum	Average
1/10/01	310	310	540	425
2/8/01	540			

NON-METALS				
% VOL REDUCTION				
Date:	Results:	Minimum	Maximum	Average
1/2/01	50.4	44.15	62.18	54.36
1/9/01	52.83			
1/16/01	46.87			
1/23/01	54.92			
1/30/01	58			
2/6/01	57.6			
2/13/01	47.94			
2/20/01	57.6			
2/27/01	44.15			
3/6/01	60.9			

NON-METALS				
% VOL REDUCTION				
Date:	Results:	Minimum	Maximum	Average
3/13/01	58.32			
3/20/01	62.18			
3/27/01	54.92			
AMMONIA AS N				
Date:	Results:	Minimum	Maximum	Average
1/10/01	21000	21000	21000	21000
BP1-CAKE-TOTAL SOLIDS				
Date:	Results:	Minimum	Maximum	Average
1/10/01	16	14	21	16.25
1/11/01	16			
1/12/01	14			
1/15/01	15			
1/16/01	16			
1/17/01	16			
1/18/01	21			
2/8/01	16			
GEOMEAN				
Date:	Results:	Minimum	Maximum	Average
1/18/01	48000	48000	48000	48000
Org-N (NP)				
Date:	Results:	Minimum	Maximum	Average
1/10/01	45000	45000	45000	45000
TKN				
Date:	Results:	Minimum	Maximum	Average
1/10/01	66000	66000	66000	66000

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: HEMET-SAN JACINTO RWRP Monitoring Period 1/1/01 to 3/31/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	12.75	1.6	420	26	< 3	8.9	44	9.75	625	5.72%	0.58%	17.62
Max	18	1.6	420	26	<3	9.4	44	13	630	5.72%	0.58%	21
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 1/1/01 to 3/31/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 3 (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 4 (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C
- ☒ fecal coliform: geometric mean of seven samples = 270,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is \geq 12

3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 33.51 (minimum) = 56.39 (average)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH \geq 12 for 2 hours after alkali addition, \geq 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 4/26/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 1/1/01 to 3/31/01
 HEMET-SAN JACINTO RWRf

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
1/9/01	18	7.5	18	12.75
1/10/01	7.5			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
1/9/01	1.6	1.6	1.6	1.6
1/10/01	1.6			

COPPER

Date:	Results:	Minimum	Maximum	Average
1/9/01	420	420	420	420
1/10/01	420			

LEAD

Date:	Results:	Minimum	Maximum	Average
1/9/01	26	26	26	26
1/10/01	26			

MERCURY

Date:	Results:	Minimum	Maximum	Average
1/9/01	<3	<3	<3	< 3
1/10/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
1/9/01	9.4	8.4	9.4	8.9
1/10/01	8.4			

NICKEL

Date:	Results:	Minimum	Maximum	Average
1/9/01	44	44	44	44
1/10/01	44			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
1/9/01	13	6.5	13	9.75
1/10/01	6.5			

ZINC

Date:	Results:	Minimum	Maximum	Average
1/9/01	630	620	630	625
1/10/01	620			

NON-METALS

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
1/10/01	5800	5800	5800	5800

NON-METALS

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
1/9/01	18	14	21	17.63
1/10/01	18			
1/11/01	21			
1/12/01	19			
1/15/01	14			
1/16/01	16			
1/17/01	17			
1/18/01	18			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
1/18/01	270000	270000	270000	270000

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
1/10/01	57200	57200	57200	57200

TKN

Date:	Results:	Minimum	Maximum	Average
1/10/01	63000	63000	63000	63000

VOL SOL % REDUCTION

Date:	Results:	Minimum	Maximum	Average
1/1/01	100	33.51	100	56.4
1/8/01	33.51			
1/15/01	52.21			
1/18/01	52.21			
1/22/01	58.82			
2/1/01	56.48			
2/12/01	59.52			
2/15/01	38.31			
3/1/01	53.35			
3/18/01	59.52			
3/25/01	56.48			

QUARTERLY CERTIFICATION STATEMENTS
(April - June, 2001)

HEMET/SAN JACINTO, MORENO VALLEY AND
TEMECULA VALLEY REGIONAL WATER
RECLAMATION FACILITIES



Board of Directors

President

Rodger D. Siems

Vice President

Richard R. Hall

Marion V. Ashley

Randy A. Record

David J. Slawson

Board Secretary

Mary C. White

General Manager

John B. Brudin

***Director of the
Metropolitan Water
District of So. Calif.***

Marion V. Ashley

Treasurer

Joseph J. Kuebler, CPA

Legal Counsel

Redwine and Sherrill

July 2, 2001

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Grey:

Attached please find the certification statements for the second quarter (April through June, 2001) for Hemet/San Jacinto, Temecula Valley, and Moreno Valley RWRFs. The Moreno Valley RWRf ceased land application of its biosolids effective May 24, 200, due to concerns over the ability of the Moreno Valley RWRf to meet Class B pathogen standards, as well as volatile solids reduction requirements. Attached to this letter is a copy of the e-mail record to and from Jeff King of your company, stating these concerns.

If you have any questions regarding these reports, please contact Mike Luker at (909) 928-3777, ext. 6255, or Jayne Joy at ext. 6241.

Sincerely,

Anthony J. Pack
*Deputy General Manager
Administration and Operations*

cc. Mike Luker, Director of Water Reclamation
David Morycz, Manager of Regulatory Services
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WP\ENVIRON\BRIGGS\CERTCOVE.SLD

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: HEMET-SAN JACINTO RWRP Monitoring Period 4/1/01 to 6/30/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	< 4.64	2.15	750	13.8	< 3	12.3	77	10.6	1050	4.89%	0.89%	16.39
Max	<5.2	2.7	930	19	<3	17	86	15	1300	5.14%	0.99%	19
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 4/1/01 to 6/30/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 3$ (temp, degrees C) for times between 15 and 60 days
☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 4$ (temp, degrees C) for times between 40 and 60 days
☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 decrees C
☒ fecal coliform: geometric mean of seven samples = 130,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

3. Vector Attraction Reduction:

☒ Option 1: VSR = 50.15 (minimum) = 55.29 (average)
VAR: VSR 38%
☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hours
☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 7/2/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 4/1/01 to 6/30/01
 HEMET-SAN JACINTO RWRP

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
4/9/01	<4.09	<4.09	5.2	4.64
4/11/01	<5.2			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	1.6	1.6	2.7	2.15
4/11/01	2.7			

COPPER

Date:	Results:	Minimum	Maximum	Average
4/9/01	570	570	930	750
4/11/01	930			

LEAD

Date:	Results:	Minimum	Maximum	Average
4/9/01	8.6	8.6	19	13.8
4/11/01	19			

MERCURY

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3	<3	3	3
4/11/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	7.6	7.6	17	12.3
4/11/01	17			

NICKEL

Date:	Results:	Minimum	Maximum	Average
4/9/01	68	68	86	77
4/11/01	86			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	<6.2	6.2	15	10.6
4/11/01	15			

ZINC

Date:	Results:	Minimum	Maximum	Average
4/9/01	800	800	1300	1050
4/11/01	1300			

NON-METALS

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
4/9/01	9900	7910	9900	8905
6/13/01	7910			

NON-METALS

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
4/9/01	16	10	19	16.4
4/10/01	16			
4/11/01	16			
4/11/01	10			
4/12/01	17			
4/16/01	18			
4/17/01	17			
4/18/01	18			
6/12/01	19			
6/13/01	17			
6/14/01	18			
6/18/01	13			
6/19/01	16			
6/20/01	18			
6/21/01	17			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
4/18/01	95000	95000	130000	112500
6/21/01	130000			

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
4/9/01	46356	46356	51490	48923
6/13/01	51490			

TKN

Date:	Results:	Minimum	Maximum	Average
4/9/01	56256	56256	59400	57828
6/13/01	59400			

VOL SOL % REDUCTION

Date:	Results:	Minimum	Maximum	Average
4/3/01	62.5	50.15	62.5	55.3
4/9/01	61.33			
4/19/01	51.14			
4/22/01	54.41			
4/26/01	57.6			
5/7/01	56.48			
5/10/01	51.14			
5/21/01	58.42			
5/25/01	55.43			
5/31/01	55.43			
6/12/01	54.41			
6/14/01	51.14			
6/18/01	55.43			
6/21/01	56.48			
6/25/01	53.35			
6/28/01	50.15			

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: TEMECULA VALLEY RWRP Monitoring Period 4/1/01 to 6/30/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	4.9	0.95	640	5.85	43	12	61	8.15	505	6.24%	0.87%	16.78
Max	6	0.99	640	8.4	< 3	12	84	10	550	6.99%	0.9%	20
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 4/1/01 to 6/30/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 3$ (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 4$ (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 decrees C
- ☒ fecal coliform: geometric mean of seven samples = 79,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

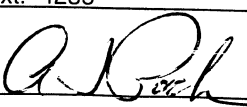
3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 52.1 (average) 42.26 (Minimum)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 7/2/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 4/1/01 to 6/30/01
 TEMECULA VALLEY RWRf

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
4/9/01	3.8	3.8	6	4.9
5/10/01	6			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	0.91	0.91	0.99	0.95
5/10/01	0.99			

COPPER

Date:	Results:	Minimum	Maximum	Average
4/9/01	640	640	640	640
5/10/01	640			

LEAD

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3.3	3.3	8.4	5.85
5/10/01	8.4			

MERCURY

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3	<3	<3	3
5/10/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	12	12	12	12

NICKEL

Date:	Results:	Minimum	Maximum	Average
4/9/01	84	38	84	61
5/10/01	38			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	6.3	6.3	10	8.15
5/10/01	10			

ZINC

Date:	Results:	Minimum	Maximum	Average
4/9/01	460	460	550	505
5/10/01	550			

NON-METALS

% VOL REDUCTION

Date:	Results:	Minimum	Maximum	Average
4/3/01	51.76	42.26	59.34	52.11
4/10/01	46.08			
4/17/01	59.34			
4/24/01	47.78			
5/1/01	57.02			
5/8/01	51.62			
5/15/01	42.26			
5/22/01	52.2			
5/29/01	56.47			
6/5/01	57.6			

NON-METALS

% VOL REDUCTION

Date:	Results:	Minimum	Maximum	Average
6/12/01	49.3			
6/26/01	53.89			

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
4/9/01	9070	8460	9070	8765
6/12/01	8460			

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
4/9/01	17	14	20	16.79
4/10/01	16			
4/11/01	16			
4/12/01	16			
4/16/01	18			
4/17/01	17			
4/18/01	17			
5/10/01	17			
6/12/01	14			
6/13/01	17			
6/14/01	20			
6/18/01	17			
6/19/01	16			
6/20/01	16			
6/20/01	17			
6/20/01	17			
6/20/01	17			
6/21/01	17			
6/21/01	17			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
4/18/01	46000	46000	79000	62500
6/21/01	79000			

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
4/9/01	54907	54907	69940	62423.5
6/12/01	69940			

TKN

Date:	Results:	Minimum	Maximum	Average
4/9/01	63977	63977	78400	71188.5
6/12/01	78400			

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: MORENO VALLEY RWRP Monitoring Period 4/1/01 to 6/30/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	< 3.4	< 0.72	240	< 3.6	< 3	3.7	45	< 5.3	300	4.88%	0.62%	15.21
Max	< 3.4	< 0.72	240	< 3.6	< 3	3.7	45	< 5.3	300	7.63%	0.69%	16
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 4/1/01 to 6/30/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 3$ (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 4$ (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 decrees C
- ☒ fecal coliform: geometric mean of seven samples = 130,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 36.81 (average) 4.68 (minimum)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Anthony J. Pack, Deputy General Manager

Phone: (909) 928-3777 ext. 4235 E-Mail: packt@emwd.org

Signature:  Date: 7/2/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 4/1/01 to 6/30/01
 MORENO VALLEY RWRP

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3.4	<3.4	< 3.4	< 3.4

CADMIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	<0.72	<0.72	< 0.72	< 0.72

COPPER

Date:	Results:	Minimum	Maximum	Average
4/9/01	240	240	240	240

LEAD

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3.6	<3.6	< 3.6	< 3.6

MERCURY

Date:	Results:	Minimum	Maximum	Average
4/9/01	<3	<3	< 3	< 3

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	3.7	3.7	3.7	3.7

NICKEL

Date:	Results:	Minimum	Maximum	Average
4/9/01	45	45	45	45

SELENIUM

Date:	Results:	Minimum	Maximum	Average
4/9/01	<5.3	<5.3	< 5.3	< 5.3

ZINC

Date:	Results:	Minimum	Maximum	Average
4/9/01	300	300	300	300

NON-METALS

% Vol Reduce

Date:	Results:	Minimum	Maximum	Average
4/2/01	46.15	4.68	59.2953309	36.81
4/5/01	59.3			
4/9/01	45.13			
4/16/01	22.74			
4/19/01	4.68			
5/3/01	36.47			
5/7/01	29.98			
5/10/01	51.89			
5/14/01	42.7			
5/21/01	48.15			
5/24/01	25.99			
6/7/01	28.67			

NON-METALS

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
4/9/01	5480	5480	6960	6220
6/12/01	6960			

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
4/9/01	16	13	16	15.21
4/10/01	16			
4/11/01	15			
4/12/01	16			
4/16/01	15			
4/17/01	15			
4/18/01	14			
6/7/01	14			
6/12/01	16			
6/13/01	15			
6/14/01	13			
6/18/01	16			
6/19/01	16			
6/20/01	15			
6/21/01	15			
6/22/01	15			
6/22/01	16			
6/22/01	15			
6/22/01	16			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
4/18/01	130000	120000	130000	125000
6/21/01	120000			

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
4/9/01	76356	21440	76356	48898
6/12/01	21440			

TKN

Date:	Results:	Minimum	Maximum	Average
4/9/01	81836	28400	81836	55118
6/12/01	28400			

Briggs, Anne

From: Wippler, Mark
Sent: Monday, June 04, 2001 2:03 PM
To: Briggs, Anne
Subject: FW: VOL SOLIDS REDUCTION

-----Original Message-----

From: King, Jeffrey [mailto:JKing@SYNAGRO.com]
Sent: Wednesday, May 30, 2001 12:37 PM
To: 'Wippler, Mark'
Subject: RE: VOL SOLIDS REDUCTION

Mark. We are currently taking your material to the compost site for composting. This was made known to us last week. I believe on Thursday 5-24-01 and nothing has been delivered to the fields since then. You should make sure to copy Mark Gray on these emails. He is the regional Technical Director and needs to know of these issue as well. I have forwarded this email to him so he is in the loop.

Thanks, Jeff King

-----Original Message-----

From: Wippler, Mark [mailto:wipplerm@emwd.org]
Sent: Wednesday, May 30, 2001 10:24 AM
To: 'jking@synagro.com'
Cc: Briggs, Anne; Ingersol, Steve; Meacham, Robert; Luker, Mike
Subject: FW: VOL SOLIDS REDUCTION

Jeff Are your composting MVRWRF sludge Yet?

-----Original Message-----

From: Meacham, Robert
Sent: Thursday, May 24, 2001 3:34 PM
To: 'King, Jeffrey'
Cc: Ingersol, Steve; Meacham, Robert; Wippler, Mark; Briggs, Anne
Subject: RE: VOL SOLIDS REDUCTION

Jeff, we would like Synagro to discontinue the land application of the sludge hauled from the Moreno Valley Facility(EMWD). Back in January, I notified you regarding the Volatile Solids reduction not meeting the Class B requirements as specified in our Sludge Regulations. You replied with the 6 hour incorporation information. Our current concern is meeting the pathogen level of 2,000,000 MPN/g TS. Our latest records from April 2001 test results were 200,000 MPN/g TS. The reason for the increased pathogen count is that we have two out of four digesters out of service for mixing upgrades. The reduced detention time could have a negative impact on our ability to reduce pathogens. Due to the infrequent sampling intervals and the inability to forecast the effect the upgrade will have, we're requesting that the sludge hauled from our Facility be composted.

Thanks, Robert Meacham

-----Original Message-----

From: King, Jeffrey [mailto:JKing@SYNAGRO.com]
Sent: Tuesday, January 16, 2001 10:53 PM
To: 'Meacham, Robert'
Subject: RE: VOL SOLIDS REDUCTION

Robert, to follow up on this.

By not meeting the Class B requirement of 38% Volitol Solids Reduction, it requires me to have this material spread and incorporated within a 6 hour time period for a land application site. It does not eliminate the use of in the field, it only restricts the way we handle it. The concern here is to minimize vector attraction since the material is not fully stabilized. If the pathogen levels were to increase beyond EPA 503 standards then we would have to eliminate the use of it in the fields.

Please keep me posted.

If you would need to ask questions or need more information please feel free to contact our Technical Services Director, Mark Grey: mgrey@synagro.com

Thanks, Jeff King

-----Original Message-----

From: Meacham, Robert

To: 'jking@synagro.com'

Cc: Meacham, Robert

Sent: 1/13/01 1:10 PM

Subject: VOL SOLIDS REDUCTION

Jeff, I wanted to let you know that the sludge currently being hauled out

of the Moreno Valley Regional Water Reclamation Facility (EMWD) does not meet the Class B requirement of 38% Vol. Solids Reduction requirement.

The tests we ran on 1/11/01 failed. We retested on 1/12/01 and it failed again.

With the recent rainfall we received in our area I doubt that any sludge has been land applied anyway. We will keep you posted on this matter and let you

know when we are meeting the requirements.

Thanks,

Robert Meacham

QUARTERLY CERTIFICATION STATEMENTS
(July – September, 2001)

HEMET/SAN JACINTO, MORENO VALLEY AND
TEMECULA VALLEY REGIONAL WATER
RECLAMATION FACILITIES



Board of Directors

President

Rodger D. Siems

Vice President

Richard R. Hall

Marion V. Ashley

Randy A. Record

David J. Slawson

Board Secretary

Mary C. White

General Manager

John B. Brudin

**Director of the
Metropolitan Water
District of So. Calif.**

Marion V. Ashley

Assurer

Joseph J. Kuebler, CPA

Legal Counsel

Redwine and Sherrill

October 1, 2001

Mr. Mark Gray
Regional Technical Services Manager
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Grey:

Attached please find the certification statements for the third quarter (July through September, 2001) for Hemet/San Jacinto and Temecula Valley RWRFs. The Moreno Valley RWRf ceased land application of its biosolids effective May 24, 2001, due to concerns over the ability of the Moreno Valley RWRf to meet Class B pathogen standards, as well as volatile solids reduction requirements.

If you have any questions regarding these reports, please contact Jayne Joy at ext. 6241.

Sincerely,

A handwritten signature in cursive script that reads "Mike Luker".

Mike Luker
Assistant General Manager,
Administration and Maintenance

cc: David Morycz, Manager of Regulatory Services
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WP\ENVIRON\BRIGGS\CERTCOVE.SLD

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: TEMECULA VALLEY RWRP Monitoring Period 7/1/01 to 9/30/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	6	1	455	9	<3	16	16	9.5	465	5.08%	0.76%	16.05
Max	6	1	480	9	<3	16	17	10	480	5.08%	0.76%	18
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 7/1/01 to 9/30/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 3 (temp, degrees C) for times between 15 and 60 days

☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 4 (temp, degrees C) for times between 40 and 60 days

☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C

☒ fecal coliform: geometric mean of seven samples = 88,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn

☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is \geq 12

3. Vector Attraction Reduction:

☒ Option 1: VSR = 51.14 (average) 40.69 (Minimum)
VAR: VSR 38%

☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)

☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)

☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C

☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH \geq 12 for 2 hours after alkali addition, \geq 11.5 for additional 22 hours

☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%

☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%

☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Mike Luker Assistant General Manager

Phone: (909) 928-3777 ext. 6255 E-Mail: lukerm@emwd.org

Signature: Mike Luker Date: 10/2/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 7/1/01 to 9/30/01
 TEMECULA VALLEY RWRP

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
8/10/01	6	6	6	6
8/13/01	6			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
8/10/01	1	<1	1	1
8/13/01	<1			

COPPER

Date:	Results:	Minimum	Maximum	Average
8/10/01	480	430	480	455
8/13/01	430			

LEAD

Date:	Results:	Minimum	Maximum	Average
8/10/01	9	9	9	9
8/13/01	9			

MERCURY

Date:	Results:	Minimum	Maximum	Average
8/10/01	<3	<3	<3	3
8/13/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
8/13/01	16	16	16	16

NICKEL

Date:	Results:	Minimum	Maximum	Average
8/10/01	17	15	17	16
8/13/01	15			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
8/10/01	10	9	10	9.5
8/13/01	9			

ZINC

Date:	Results:	Minimum	Maximum	Average
8/10/01	480	450	480	465
8/13/01	450			

NON-METALS

% VOL REDUCTION

Date:	Results:	Minimum	Maximum	Average
7/3/01	56.93	40.69	60.06	51.14
7/10/01	54.97			
7/17/01	54.97			
7/24/01	40.69			
7/31/01	54.92			
8/7/01	48.99			
8/14/01	52.85			
8/21/01	43.92			
8/28/01	60.06			
9/4/01	48.78			

NON-METALS

% VOL REDUCTION

Date:	Results:	Minimum	Maximum	Average
9/11/01	47.54			
9/18/01	56.16			
9/25/01	44.07			

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
8/13/01	7600	7600	7600	7600

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
7/5/01	16	14.8	18	16.06
7/5/01	15.8			
7/5/01	15.6			
7/5/01	15.5			
7/16/01	15.4			
7/16/01	14.8			
7/16/01	15			
7/16/01	15.1			
7/23/01	15.8			
7/23/01	15.7			
7/23/01	16			
7/23/01	16.6			
8/10/01	18			
8/13/01	18			
8/14/01	16			
8/15/01	18			
8/16/01	15			
8/20/01	16			
8/21/01	16			
8/22/01	16			
9/18/01	17			
9/18/01	16			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
8/22/01	88000	88000	88000	88000

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
8/13/01	50800	50800	50800	50800

TKN

Date:	Results:	Minimum	Maximum	Average
8/13/01	58400	58400	58400	58400

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: HEMET-SAN JACINTO RWRP Monitoring Period 7/1/01 to 9/30/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	11.5	2.6	515	29.5	<3	14.5	16.5	11.34	815	5.29%	0.9%	19.02
Max	18	3.2	550	38	<3	16	20	13	890	5.29%	0.9%	21
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 7/1/01 to 9/30/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 3 (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 4 (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C
- ☒ fecal coliform: geometric mean of seven samples = 80,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is \geq 12

3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 42.73 (minimum) = 54.73 (average)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH \geq 12 for 2 hours after alkali addition, \geq 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Mike Luker Assistant General Manager

Phone: (909) 928-3777 ext. 6255 E-Mail: lukerm@emwd.org

Signature: Mike Luker Date: 10/2/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 7/1/01 to 9/30/01
 HEMET-SAN JACINTO RWRF

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
7/10/01	18	< 5	18	11.5
8/13/01	<5			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
7/10/01	3.2	2	3.2	2.6
8/13/01	2			

COPPER

Date:	Results:	Minimum	Maximum	Average
7/10/01	550	480	550	515
8/13/01	480			

LEAD

Date:	Results:	Minimum	Maximum	Average
7/10/01	38	21	38	29.5
8/13/01	21			

MERCURY

Date:	Results:	Minimum	Maximum	Average
7/10/01	<3	<3	3	3
8/13/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
7/10/01	16	13	16	14.5
8/13/01	13			

NICKEL

Date:	Results:	Minimum	Maximum	Average
7/10/01	20	13	20	16.5
8/13/01	13			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
7/10/01	9.7	9.69	13	11.35
8/13/01	13			

ZINC

Date:	Results:	Minimum	Maximum	Average
7/10/01	890	740	890	815
8/13/01	740			

NON-METALS

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
8/13/01	9000	9000	9000	9000

NON-METALS

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
7/10/01	18.2	17	21	19.02
8/13/01	17			
8/14/01	19			
8/15/01	18			
8/16/01	19			
8/20/01	21			
8/21/01	20			
8/22/01	20			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
8/22/01	80000	80000	80000	80000

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
8/13/01	52900	52900	52900	52900

TKN

Date:	Results:	Minimum	Maximum	Average
8/13/01	61900	61900	61900	61900

VOL SOL % REDUCTION

Date:	Results:	Minimum	Maximum	Average
7/2/01	50.15	42.73	65.1253663	54.74
7/5/01	55.43			
7/9/01	56.48			
7/26/01	57.39			
7/30/01	54.47			
8/2/01	52.38			
8/6/01	65.13			
8/9/01	61.33			
8/10/01	55.56			
8/13/01	49.24			
8/20/01	42.74			
8/23/01	47.62			
8/26/01	59.23			
8/30/01	54.47			
9/6/01	49.24			
9/10/01	55.43			
9/13/01	56.48			
9/20/01	62.62			

QUARTERLY CERTIFICATION STATEMENTS
(October - December, 2001)

HEMET/SAN JACINTO AND TEMECULA VALLEY
REGIONAL WATER
RECLAMATION FACILITIES



Board of Directors

President

Rodger D. Siems

Vice President

Richard R. Hall

Marion V. Ashley
Randy A. Record
David J. Slawson

Board Secretary

Mary C. White

General Manager

Anthony J. Pack

***Director of the
Metropolitan Water
District of So. Calif.***

Marion V. Ashley

Treasurer

Joseph J. Kuebler, CPA

Legal Counsel

Redwine and Sherrill

December 21, 2001

Mr. Mark Grey
Synagro of California
P.O. Box 7027
Corona, CA 92878-7027

Dear Mr. Grey:

Attached please find the Class B certification statements for the Temecula Valley and Hemet/San Jacinto RWRFs for the reporting period of October 1 through December 31.

If you have any questions regarding these reports, please contact Jayne Joy at (909) 928-3777 ext. 6241.

Sincerely,

Mike Luker
Assistant General Manager,
Administration and Maintenance

cc: David Morycz, Manager of Environmental Services
Anne Briggs, Senior Environmental Compliance Analyst

J:\WORDPROC\WPI\ENVIRON\BRIGGS\CERTCOVE.SLD

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177
Location: 2270 Trumble Road Perris, CA 92570 Internet: www.emwd.org

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: TEMECULA VALLEY RWRP Monitoring Period 10/1/01 to 12/31/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	6.79	1.05	485	8.94	<3	20	19	8.4	455	5.17%	0.57%	17.04
Max	9	1.1	490	10	<3	20	21	11	490	6.59%	0.7%	20
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 10/1/01 to 12/31/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 3 (temp, degrees C) for times between 15 and 60 days
☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) \geq 120 - 4 (temp, degrees C) for times between 40 and 60 days
☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 degrees C
☒ fecal coliform: geometric mean of seven samples = 86,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is \geq 12

3. Vector Attraction Reduction:

☒ Option 1: VSR = 44.38 (average) 39.83 (Minimum)
VAR: VSR 38%
☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH \geq 12 for 2 hours after alkali addition, \geq 11.5 for additional 22 hours
☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Mike Luker, Assistant General Manager

Phone: (909) 928-3777 ext. 6255

E-mail: lukerm@emwd.org

Signature: Mike Luker

Date: 12/21/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 10/1/01 to 12/31/01
 TEMECULA VALLEY RWRf

METALS				
ARSENIC				
Date:	Results:	Minimum	Maximum	Average
10/8/01	9	4.59	9	6.8
11/1/01	4.59			
CADMIUM				
Date:	Results:	Minimum	Maximum	Average
10/8/01	<1	1	1.1	1.05
11/1/01	1.1			
COPPER				
Date:	Results:	Minimum	Maximum	Average
10/8/01	490	480	490	485
11/1/01	480			
LEAD				
Date:	Results:	Minimum	Maximum	Average
10/8/01	10	7.9	10	8.95
11/1/01	7.9			
MERCURY				
Date:	Results:	Minimum	Maximum	Average
10/8/01	<3	<3	<3	3
11/1/01	<3			
MOLYBDENUM				
Date:	Results:	Minimum	Maximum	Average
10/8/01	20	20	20	20
NICKEL				
Date:	Results:	Minimum	Maximum	Average
10/8/01	17	17	21	19
11/1/01	21			
SELENIUM				
Date:	Results:	Minimum	Maximum	Average
10/8/01	11	5.8	11	8.4
11/1/01	5.8			
ZINC				
Date:	Results:	Minimum	Maximum	Average
10/8/01	490	420	490	455
11/1/01	420			

NON-METALS				
% VOL REDUCTION				
Date:	Results:	Minimum	Maximum	Average
10/2/01	42.1	39.83	56.47	44.39
10/9/01	56.47			
10/16/01	39.83			
10/30/01	43.05			
11/6/01	40.25			
11/13/01	47.78			
11/27/01	41.24			

NON-METALS				
AMMONIA AS N				
Date:	Results:	Minimum	Maximum	Average
10/8/01	4400	4400	7000	5700
12/10/01	7000			
BP1-CAKE-TOTAL SOLIDS				
Date:	Results:	Minimum	Maximum	Average
10/8/01	16.6	16	20	17.05
10/9/01	16			
10/10/01	17			
10/11/01	16			
10/15/01	16			
10/16/01	16			
10/17/01	16			
10/17/01	16			
11/1/01	20			
12/10/01	18			
12/11/01	19			
12/12/01	18			
12/13/01	17			
GEOMEAN				
Date:	Results:	Minimum	Maximum	Average
10/17/01	86000	86000	86000	86000
Org-N (NP)				
Date:	Results:	Minimum	Maximum	Average
10/8/01	37600	37600	65900	51750
12/10/01	65900			
TKN				
Date:	Results:	Minimum	Maximum	Average
10/8/01	42000	42000	72900	57450
12/10/01	72900			

Notice and Necessary Information
To be Completed by Preparers of Class B Biosolids

Facility Name: HEMET-SAN JACINTO RWRP Monitoring Period 10/1/01 to 12/31/01

1. Pollutant and Nitrogen concentrations (Report results on 100% dry weight basis. Attach lab analyses).

	As	Cd	Cu	Pb	Hg	Mo	Ni	Se	Zn	Org-N	NH ₄ -N	% solids
Avg	4.5	1.5	276.5	14.5	<3	7.5	9	11.5	425.5	5.78%	0.53%	17.29
Max	<5	2	500	24	<3	13	14	18	770	6.77%	0.98%	21
Table 3	41	39	1500	300	17	na	420	100	2800	na	na	na
Table 1	75	85	4300	840	57	75	420	100	7500	na	na	na

Sampling date(s): 10/1/01 to 12/31/01

2. Class B Pathogen Reduction: (Check off and fill in applicable portion)

- ☐ anaerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 3$ (temp, degrees C) for times between 15 and 60 days
- ☐ aerobic digestion for _____ to _____ days at _____ to _____ degrees F/C (range for past month)
Class B: time (days) $\geq 120 - 4$ (temp, degrees C) for times between 40 and 60 days
- ☐ drying beds for _____ to _____ months (attach records of dates in and out)
Class B: time > 3 months: 2 months > 0 decrees C
- ☒ fecal coliform: geometric mean of seven samples = 61,000 (maximum)
Class B: geometric mean of seven samples is < 2,000,000 mpn
- ☐ lime stabilization: pH at 2 hours after addition = _____
Class B: pH 2 hours after addition of lime is ≥ 12

3. Vector Attraction Reduction:

- ☒ Option 1: VSR = 43.51 (minimum) = 53.45 (average)
VAR: VSR 38%
- ☐ Option 2/3: Bench scale test: % VSR = _____ after _____ days
VAR: additional VSR < 17% after 40 days (anaerobic), < 15% after 30 days (aerobic)
- ☐ Option 4: SOUR = _____
VAR: SOUR < 1.5 mg O₂/hr/gram (dry weight)
- ☐ Option 5: Composted _____ days at temps of _____ to _____ degrees F/C (attach times/temps)
VAR: temp > 40 degrees C for 14 days, w/5 days > 45 degrees C
- ☐ Option 6: time alkali added: _____ pH after 2 hours = _____ pH after 22 hours = _____
VAR: pH ≥ 12 for 2 hours after alkali addition, ≥ 11.5 for additional 22 hours
- ☐ Option 7: % solids = _____ Stabilization method: _____
VAR: stabilized solids > 75%
- ☐ Option 8: % solids = _____
VAR: unstabilized solids > 90%
- ☐ Option 9/10: Applier will inject/incorporate within _____ hours
VAR: injection within 1 hour, incorporation within 6 hours

Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Mike Luker, Assistant General Manager

Phone: (909) 928-3777 ext. 6255

E-mail: lukerm@emwd.org

Signature: Mike Luker

Date: 12/21/01

EASTERN MUNICIPAL WATER DISTRICT
QUARTERLY SLUDGE REPORT: 10/1/01 to 12/31/01
 HEMET-SAN JACINTO RWRP

METALS

ARSENIC

Date:	Results:	Minimum	Maximum	Average
10/8/01	<5	<5	45	45
10/16/01	<5			

CADMIUM

Date:	Results:	Minimum	Maximum	Average
10/8/01	2	<1	2	1.5
10/16/01	<1			

COPPER

Date:	Results:	Minimum	Maximum	Average
10/8/01	500	53	500	276.5
10/16/01	53			

LEAD

Date:	Results:	Minimum	Maximum	Average
10/8/01	24	<5	24	14.5
10/16/01	<5			

MERCURY

Date:	Results:	Minimum	Maximum	Average
10/8/01	<3	<3	<3	<3
10/16/01	<3			

MOLYBDENUM

Date:	Results:	Minimum	Maximum	Average
10/8/01	13	2	13	7.5
10/16/01	2			

NICKEL

Date:	Results:	Minimum	Maximum	Average
10/8/01	14	4	14	9
10/16/01	4			

SELENIUM

Date:	Results:	Minimum	Maximum	Average
10/8/01	18	5	18	11.5
10/16/01	<5			

ZINC

Date:	Results:	Minimum	Maximum	Average
10/8/01	770	81	770	425.5
10/16/01	81			

NON-METALS

AMMONIA AS N

Date:	Results:	Minimum	Maximum	Average
10/8/01	990	990	9800	5395
12/10/01	9800			

NON-METALS

BP1-CAKE-TOTAL SOLIDS

Date:	Results:	Minimum	Maximum	Average
10/8/01	18.9	15	21	17.3
10/9/01	18			
10/10/01	21			
10/11/01	16			
10/15/01	17			
10/16/01	17.7			
10/16/01	16			
10/17/01	18			
12/10/01	16			
12/11/01	17			
12/12/01	15			
12/13/01	17			

GEOMEAN

Date:	Results:	Minimum	Maximum	Average
10/17/01	61000	61000	61000	61000

Org-N (NP)

Date:	Results:	Minimum	Maximum	Average
10/8/01	48010	48010	67700	57855
12/10/01	67700			

TKN

Date:	Results:	Minimum	Maximum	Average
10/8/01	49000	49000	77500	63250
12/10/01	77500			

VOL SOL % REDUCTION

Date:	Results:	Minimum	Maximum	Average
10/1/01	56.48	43.51	67.5675676	53.46
10/4/01	55.43			
10/8/01	51.14			
10/11/01	54.41			
10/15/01	46.88			
10/25/01	53.35			
10/28/01	55.43			
11/5/01	67.57			
11/15/01	56.48			
11/19/01	44.35			
11/22/01	43.51			
11/26/01	56.48			

APPENDIX C
FECAL COLIFORM DATA
FOR
CALENDAR YEAR
2001

LEGENDS

Legends for the following laboratory analytical sheets are as follows.

HSJ or HSJ RWRf – Hemet/San Jacinto Regional Water Reclamation Facility

MV or MV RWRf– Moreno Valley Regional Water Reclamation Facility

PV or PV RWRf– Perris Valley Regional Water Reclamation Facility

TV or TV RWRf – Temecula Valley Regional Water Reclamation Facility

					Geomean
					Reported
HSJ-CAKE DAY 7	BP-CAKE	01/18/01	E01011809-01	MPN/gTS	270000
		04/18/01	E01041807-01	MPN/gTS	95000
		06/21/01	E01062109-01	MPN/gTS	130000
		08/22/01	E01082207-01	MPN/gTS	80000
		10/17/01	E01101709-01	MPN/gTS	61000
		12/19/01	E01121907-01	MPN/gTS	92000
MV-CAKE DAY 7	BP-CAKE	01/18/01	E01011809-02	MPN/gTS	210000
		04/18/01	E01041807-02	MPN/gTS	130000
		06/21/01	E01062109-02	MPN/gTS	120000
		08/22/01	E01082207-02	MPN/gTS	120000
		10/24/01	E01102410-02	MPN/gTS	177121.
		12/19/01	E01121907-02	MPN/gTS	110000
PVUPMW503-7	PVUPMW-503	10/23/01	E01102311-21	MPN/gTS	51739.
PVUPNW503-7	PVUPNW-503	10/23/01	E01102311-14	MPN/gTS	30352.
PVUPSW503-7	PVUPSW-503	10/23/01	E01102311-07	MPN/gTS	3300
TV-CAKE DAY 7	BP-CAKE	01/18/01	E01011809-03	MPN/gTS	48000
		04/18/01	E01041807-03	MPN/gTS	46000
		06/21/01	E01062109-03	MPN/gTS	79000
		08/22/01	E01082207-03	MPN/gTS	88000
		10/17/01	E01101709-03	MPN/gTS	86000
		12/19/01	E01121907-03	MPN/gTS	100000

APPENDIX D
NUTRIENT DATA
FOR
CALENDAR YEAR
2001

LEGENDS

Legends for the following laboratory analytical sheets are as follows.

HSJ-RWRF – Hemet/San Jacinto Regional Water Reclamation Facility

MV-RWRF– Moreno Valley Regional Water Reclamation Facility

PVBP-RWRF– Perris Valley Regional Water Reclamation Facility

TV RWRF – Temecula Valley Regional Water Reclamation Facility

Eastern Municipal Water District 503 Sludge Monitoring

HSJ-RWRF

		Ammonia as N	Conductance	Organic-N	Potassium	TKN	TP
		mg/kgDry	umhos/cm	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported
Jan-10-2001	E01011008-01	5800	630	57000	2900	63000	30000
Apr-09-2001	E01040913-01	9900	6900	46400	2400	56256.	35000
Jun-13-2001	E01061309-01	7910	1030	52000	1700	59400	32200
Aug-13-2001	E01081312-01	9000	1120	52900	2000	61900	33000
Oct-08-2001	E01100809-01	990.	2420.	48000	2000.	49000.	27000.
Dec-10-2001	E01121011-01	9800	610	67800	1900	77500	31900

Eastern Municipal Water District 503 Sludge Monitoring

MV-RWRF

		Ammonia as N	Conductance	Organic-N	Potassium	TKN	TP
		mg/kgDry	umhos/cm	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported
Jan-10-2001	E01011009-01	6400	520	61000	4100	67000	27000
Apr-09-2001	E01040914-01	5480	5000	76400	2200	81836.	21000
Jun-12-2001	E01061213-01	6960	740	21000	1900	28400	34700
Aug-13-2001	E01081314-01	9200	1070	54600	2100	63800	33000
Oct-15-2001	E01101510-01	3800	2050	58000	2100	61000	31000
Dec-10-2001	E01121012-01	6800	630	68900	1600	75700	27100

Eastern Municipal Water District 503 Sludge Monitoring

TV-RWRF

		Ammonia as N	Conductance	Organic-N	Potassium	TKN	TP
		mg/kgDry	umhos/cm	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported
Jan-10-2001	E01011010-01	21000	680	45000	3600	66000	29000
Apr-09-2001	E01040915-01	9070	6300	54900	2000	63977.	32000
Jun-12-2001	E01061214-01	8460	740	70000	2100	78400	20800
Aug-13-2001	E01081315-01	7600	1020	50800	1600	58400	25000
Oct-08-2001	E01100810-01	4400.	1920.	38000	2100.	42000.	31000.
Dec-10-2001	E01121014-01	7000	620	65900	2000	72900	32700

Eastern Municipal Water District

503 Sludge Monitoring

PVBP-RWRF

		Ammonia as N	Conductance	Organic-N	Potassium	TKN	Total Nitrogen	TP
		mg/kgDry	umhos/cm	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry	mg/kgDry
		Reported	Reported	Reported	Reported	Reported	Reported	Reported
Jun-26-2001	E01062612-01	23000		49420	42000	72400	72400	41100
	E01062612-07	12700		58700	97000	71400	71400	32300
Jul-13-2001	E01071307-01	12000	3210	42070	2400	54000	54000	31441.
	E01071307-02	9050	3640	58520	3400	67600	67600	27093.
Aug-10-2001	E01081107-04	9700	3300	41100	6700.	50800	50800	34000
Aug-24-2001	E01082410-01		930					
Aug-24-2001	E01082410-02		810					
Aug-24-2001	E01082410-03		1070					
Aug-24-2001	E01082410-04					59500		
Oct-03-2001	E01100308-09	3800.		52000	7500.	56000.	56000.	33000.
	E01100308-10	3900.		28000	7200.	31000.	31000.	33000.
	E01100308-11	4900.		18000	7600.	23000.	23000.	33000.

APPENDIX E
CLASS A BIOSOLIDS DATA
FOR
CALENDAR YEAR
2001

EASTERN MUNICIPAL WATER DISTRICT

Date: December 12, 2001
To: Anne Briggs, Regulatory Compliance
From: John Jannone, PVRWRF/Water Reclamation Department
Subject: Land Application of Class A Sludge December 2001

462 tons of Pasteurized Class A sludge produced at the PVRWRF which has been solar dried was applied on 74.5 acres located at the west end of the PVRWRF site on December 5, 6 and 7, 2001. The farmer, Pedro Indacochea, produced a combination of crops on this parcel which included three alfalfa cuttings and one sudan grass crop between January 6, 2001 and December 1, 2001.

ESTIMATE OF SLUDGE TO BE LAND APPLIED DECEMBER 2001

Month/Year	Pasteurized Wet Tons Applied	Dry Tons	Percent Solids
December 2000	859	135.7	15.8
January 2001	860	129.9	15.1
February 2001	528	82.3	15.6
March 2001	251	40.1	16.0
Totals	2498	388.0	

All of the pasteurized sludge described above was placed in one pile labeled PVPP SE503 and was tested for total solids which averaged 92.8%. By calculation ($388 \text{ dry tons} / .928 = 418 \text{ tons}$) there were 418 tons of pasteurized sludge to be removed.

Sanchez Hauling provided three weight tickets with gross, tare and net weights of the first three loads applied. Each of the 41 trucks was filled with the same amount of loader loads in order to best determine actual amount of sludge applied. The average net weight of the sludge was 22,520 pounds (11.26 tons per load) for a total of 461.66 tons applied.

The discrepancy between the theoretical 418 tons to be removed and the 462 tons actually removed can be accounted for in laboratory testing especially if percent solids removed was a more realistic 84% verses the 92.8% per test results. Also, initial dry ton amounts were determined from meter reads and laboratory testing of WAS grab samples.

Sludge application Rate calculation for 74.5 acres(Township/Range/Section is T.5S.R.3) located at the western portion of the PVRWRF site is as follows:

Background nitrate for samples taken on 8-14 averaged 26.4 mg/kgDry.

Nitrate numbers are being used for calculation per determination that ammonia is not in usable form.

The farmer, Pedro Indacochea, will grow alfalfa during the next calendar year. According to the Western Fertilizer Handbook eight edition(page 98), the application rate for Nitrogen is 480 lbs N per acre.

Background Nitrogen Calculation:

$$26.4\text{mg/KG} \times 0.00135 \text{ tons soil/acre-ft} \times 0.5\text{ft}(\text{application soil depth}) \times 2000\text{lb/ton} = \\ 35.64 \text{ lbN/acre}$$

$$\text{Can apply } 480 \text{ lbN/acre} - 35.64\text{lbN/acre} = 444.36 \text{ lbN/acre}$$

Nitrogen background of sludge to be applied is 5.4%

$$0.054\text{N} \times 2000\text{lb/ton} = 108 \text{ lbN/ton}$$

Mineralization rate Calculation:

$$108\text{lbN/ton} \times 0.928\% \text{ solids} \times 0.3(\text{mineralization rate}) = 30.1\text{lbN/ton}$$

$$444 \text{ lbN/acre} / 30 \text{ lbN/ton} = 14.8 \text{ tons sludge/acre}$$

Can apply at a rate not to exceed 9.5 tons per acre so maximum amount to be applied is:

$$74.5 \text{ acres} \times 9.5 \text{ tons/acre} = 707.8 \text{ tons can be applied which is well below the 250-480 ton range described above.}$$

The 462 tons applied was well within the 707.8 ton limit for this parcel.

Attached you will find:

- * Salmonella test results
- * Percent solids and metals testing results
- * Background nitrogen
- * PVRWRF sludge production records 2000 and 2001
- * Sanchez Hauling weight tickets
- * Sanchez hauling billing statement

Jannone, John

From: Marshall, Kenneth
Sent: Tuesday, August 14, 2001 2:10 PM
To: Jannone, John
Subject: RE: Lab Results

Sorry John... I overlooked getting these to you.

		Nitrate as N	TKN	Total Solids
		mg/kgDry	mg/kgDry	%
30-Jul-2001	PV 74 SOUTH	4.3	700	90.
30-Jul-2001	PV 74 MID	44.	290	88.
30-Jul-2001	PV 74 NORTH	31.	1100	95.
30-Jul-2001	PV 127 EAST	39.	1540	87.
30-Jul-2001	PV 127 MID	21.	2020	87.
30-Jul-2001	PV 1127 WEST	42.	1380	88.

-----Original Message-----

From: Jannone, John
Sent: Tuesday, August 14, 2001 10:49 AM
To: Marshall, Kenneth
Subject: Lab Results

I was wondering if results were in for samples delivered to you 7/31/01. They were labeled PV74South, PV74Mid, PV74North, PV127East, PV127Mid, PV127West. Thanks

Eastern Municipal Water District
Certificate of Analysis
Perris Valley RWRf

Sample Id:	E01071307-01	E01071307-02	E01071307-03	E01071307-04	E01071307-05	E01071307-06
Client Id:	PVPP SE503-1,2,3 MIX	PVPP SW503-1,2,3 MIX	PVPP SE503-1	PVPP SE503-2	PVPP SE503-3	PVUP SW503-1
Site:	PVBP-RWRf	PVBP-RWRf	PVBP-RWRf	PVBP-RWRf	PVBP-RWRf	PVBP-RWRf
Collect Date:	13-JUL-01	13-JUL-01	13-JUL-01	13-JUL-01	13-JUL-01	13-JUL-01

Parameter	Units	Value	Value	Value	Value	Value	Value
Total Nitrogen	mg/kgDry	54000	67600				
Total Kjeldahl Nitrogen	mg/kgDry	54000	67600				
Ammonia as N	mg/kgDry	12000	9050				
Total Phosphate as P	mg/kgDry	31441.	27093.				
Electrical Conductance	umhos/cm	3210	3640				
Salmonella	MPN/4gm			< 1.0	< 1.0	< 1.0	680
Organic-Nitrogen	mg/kgDry	42070	58520				
pH	units	7.5	7.2				
Total Solids	%	91.9	94.7	92.0	93.2	93.3	94.

Approved By: _____

PVRWRF SLUDGE PRODUCTION RECORDS FOR 2000

SLUDGE PRODUCTION RECORDS FOR 2000

MONTH		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Total Pounds	Pasteurized	0	216,724	153,930	340,883	410,276	425,698	325,536	372,432	352,949	294,385	227,533	271,389	11,1
Total Tons		0	108.4	77	170.4	205	213	162.8	186	176	147.2	113.7	135.7	
Percent Solids		0	17	17	15.6	14.9	14.7	14	14.1	14.7	16.1	15.7	15.8	
Wet Tons		0	638	453	1092	1376	1449	1163	1311	1197	914	725	859	
Total Pounds	Unpasteurized dirt drying beds	0	40,713	23,587	0	0	0	60,992	0	13,090	78,536	30,541	103,316	1,2
Total Tons		0	20.4	11.8	0	0	0	30.5	0	6.5	39.3	15.2	51.7	
Percent Solids		0	15.6	15.6	0	0	0	13.4	0	15.2	13.3	13.9	14.5	
Wet Tons		0	131	76	0	0	0	228	0	43	296	110	356	
Total Pounds	Unpasteurized to Synagro	412,520	96,415	135,950	63,862	0	0	0	0	0	10,765	100,303	49,300	3,0
Total Tons		206	48.2	70	30.5	0	0	0	0	0	5.4	50.2	24.7	
Percent Solids		14.2	15.6	15.2	13.6	0	0	0	0	0	14.5	13.9	14.5	
Wet Tons		1451	309	461	235	0	0	0	0	0	37	361	170	
Total wet tons all catagories for 2000														15,4

MONTH		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Total Pounds	Pasteurized	259,709	164,564	80,256	0	0	0	0	0	0	0			
Total Tons		129.9	82.3	40.1	0	0	0	0	0	0	0			
Percent Solids		15.1	15.6	16	0	0	0	0	0	0	0			
Wet Tons	Unpasteurized dirt drying beds	860	528	251	0	0	0	0	0	0	0			1,639
Total Pounds		73,690	105,432	44,394	0	0	0	0	0	0	0			
Total Tons		36.8	52.7	22.2	0	0	0	0	0	0	0			
Percent Solids		13.8	13.8	14.7	0	0	0	0	0	0	0			
Wet Tons	Unpasteurized to Synagro	267*	382*	151*	0	0	0	0	0	0	0			800
Total Pounds		61,374	93,564	248,000	215,600	204,400	181,256	212,600	198,000	268,800	233,200			
Total Tons		30.7	46.8	124	107.8	102.2	90.6	106.3	99	134.4	116.6			
Percent Solids		13.5	13.8	14.7	14	14.2	13.9	13.2	13.9	14	13.1			
Wet Tons	Unpasteurized to Asphalt	227	339	843	770	720	652	805	712	960	897			6,925
Total Pounds		0	0	163,170	209,158	62,400	270,216	303,000	362,600	265,739	270,800			
Total Tons		0	0	81.6	104.6	31.2	135.1	151.5	181.3	132.9	135.4			
Percent Solids		0	0	14.7	14	14.2	13.9	13.2	13.9	14	13.1			
Wet Tons		0	0	555	747	219	972	1148	1305	949	1027			6,922
*Dirt drying Distribution	Bed #1	Bed #2	Bed #3	Bed #4	Bed #5	Bed #6	Bed #7	Bed #8	Bed #9	Bed #10	Bed #11	Bed #12	Total wet tons all catagories for 2001	16,286
January	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
February	0	0	101 wet tons	0	0	281 wet tons	0	0	0	0	0	0		
March	0	23 wet tons	70 wet tons	58 wet tons	0	0	0	0	0	0	0	0		
April	0	0	0	0	0	0	0	0	0	0	0	0		
May	0	0	0	0	0	0	0	0	0	0	0	0		
June	0	0	0	0	0	0	0	0	0	0	0	0		
July	0	0	0	0	0	0	0	0	0	0	0	0		
August	0	0	0	0	0	0	0	0	0	0	0	0		
September	0	0	0	0	0	0	0	0	0	0	0	0		
October	0	0	0	0	0	0	0	0	0	0	0	0		
November														
December														